

MANNA, NECTAR, AND AMBROSIA.

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The Biblical manna, which the ancestors of the Jews are said to have eaten for forty years until they came to the borders of Canaan, is not the manna of commerce, which is a saccharine exudation obtained in Sicilian plantations, during July and August, by making transverse incisions through the bark of flowering-ash trees (*Fraxinus ornus*). This is employed as a gentle laxative for children and is still largely consumed in South America. The Jews' manna is generally supposed to be the honey-like exudation of a species of tamarisk on the Sinaitic peninsula. The flow of manna from the soft twigs of the *tamarix Gallica*, which is due to their being punctured by a scale insect, appears only during certain months (about the end of May and in June). It could not have yielded the daily provision of more than 300 tons;¹ the annual quantity produced on the Sinaitic peninsula is only 500 or 600 lbs. Nor could it have been ground in querns, or pounded in mortars, and baked² in baking-pots.³ It has the consistency of wax in the early morning, but melts in the heat of the sun (Exod. 16, 21). This Sinaitic manna is still collected by the Arabs and sold to the monks of St. Catherine on Mount Sinai, who supply it to the pilgrims and tourists visiting the convent.

I showed in my paper *The Burning Bush and the Origin of Judaism*, which I presented at our General Meeting in 1909, that the mountain whence the Law is said to have been given to Moses can not have been situated on the Sinaitic peninsula; it must have been a

¹ They are said to have collected an *omer* per day per person (Exod. 16, 16. 36). An *omer* is nearly a gallon (more accurately, 3.644 liters). According to Exod. 12, 37 (*cf.* 38, 26; Num. 1, 46; 26, 51) there were more than 600,000 men not including Levites, women and children; so there would have been more than two million people. These numbers are, of course, impossible; see Gray, *Numbers* (ICC) p. 12; contrast EB¹¹ 25, 139^b, below.

² For. Heb. *biššél*, to bake, *cf.* 2 S 13, 18; AJSL 26, 16; ZDMG 63, 517.

³ See the cut on p. 64 of the translation of *Leviticus* in the Polychrome Bible; *cf.* MLN 38, 433; also ZDMG 61, 714, 1. 10; JBL 36, 256.

volcano in northwestern Arabia (PAPS 48, 355).⁴ The name *Sinai* is derived from the Assyrian name of the moon-god, *Šin*. About four days' journey S.E. of Tebûk in northwestern Arabia there is an isolated table-mountain of sandstone with a high, pitch-black extinct volcano on its flattened summit, which is called *al-Badr*, i.e. the Arabic word for *full moon*. At the foot of the northern side of this sacred mountain (which was visited, on July 2, 1910, by Professor Musil, of Vienna, who will lecture in this country next fall) there are twelve large blocks of sandstone, known as *al-madâbih* = Heb. *mizbêhôt*, sacrificial altars. Similar blocks are found at the western end. On the southern side there are The Caves of the Servants of Moses, Arab. *Mağâ'ir 'abîd Mûsâ*. The ancestors of the Jews seem to have proceeded from Elath, at the northeastern end of the Red Sea, in a southeastern direction (JAOS 34, 526; 35, 387-390).

Forty years ago the distinguished mythologist W. H. Roscher published a monograph⁵ advancing the theory that nectar and ambrosia were kinds of honey like the Biblical manna. We call the saccharine fluid excreted by flowers, which attracts insects or birds, *nectar*, and we apply the name *ambrosia* to the food of certain wood-boring beetles, which consists of certain minute hyphomycetous fungi coating the walls of their galleries. In the Homeric poems (in which eighth-century Ionians describe twelfth-century events; cf. EB¹¹ 8, 426^b) *nectar* is the drink, and *ambrosia* the food of the gods; but in the Doric fragments of Alcman (the greatest lyric poet of Sparta,

⁴ Note the following abbreviations:—AJSL=*American Journal of Semitic Languages*;—AV=Authorized Version;—BA=Delitzsch and Haupt, *Beiträge zur Assyriologie*;—BL=Haupt, *Biblische Liebeslieder* (Leipsic, 1907);—CD=Century Dictionary;—EB=Cheyne-Black, *Encyclopædia Biblica*;—EB¹¹=*Encyclopædia Britannica*, 11th edition;—Est.=Haupt, *The Book of Esther* (Chicago, 1908);—GB=Gesenius-Buhl, *Hebräisches Handwörterbuch*;—GK=Gesenius-Kautzsch, *Hebräische Grammatik*;—ICC=International Critical Commentary;—JAOS=*Journal of the American Oriental Society*;—JBL=*Journal of Biblical Literature*;—JHUC=*Johns Hopkins University Circular*;—MLN=*Modern Language Notes*;—OD=*New English Dictionary*, Oxford;—OT=Old Testament;—PAPS=*Proceedings of the American Philosophical Society*;—RV=Revised Version;—S=Samuel; SEP=*Saturday Evening Post*;—VS=Brockelmann, *Vergleichende Grammatik der semitischen Sprachen*, vol. 2 (Berlin, 1913);—ZDMG=*Zeitschrift der Deutschen Morgenländischen Gesellschaft*.

⁵ W. H. Roscher, *Nektar und Ambrosia*, Leipsic, 1883.

about 650) *nectar* is the food, and in Sappho (who flourished about 600, and who shared with Alcæus the supremacy of the Æolian school of lyric poetry) *ambrosia* is the drink.

It would seem, however, that both nectar and ambrosia denote *fragrant fat*, especially the nidorous smell of the sacrifices ascending to heaven. The fragrant steam arising from a burning sacrifice was the nourishment of the gods. Ethereal beings feed on vapors, not on solid meats.⁶ The Old Testament says that an offering made by fire yields a sweet savor to JHVH. For *Let the Lord accept an offering* (1 S 26, 19) the Hebrew has *Let the Lord smell (or inhale) an offering*. In Lev. 26, 31 JHVH says: *I will not smell the savor of your sweet odors*. When Noah after the Flood offered burnt-offerings, the Lord *smelled the sweet savor*, and the cuneiform account of the Deluge states that when the Babylonian Noah offered a sacrifice, the gods gathered around him like a swarm of flies, so that the goddess Istar took the great fly-brushes of her father Anu, the god of heaven, to drive them away. Fly-brushes are the ancient Oriental symbols of sovereignty. The gods were starved because there had been no offerings during the Flood (JAOS 41, 181).

The Hebrew term for the *fragrant smoke* of the burnt-offering is *qěṭōrt*, and *nectar* seems to be derived from the same Semitic stem, just as it has been suggested that *ambrosia* may represent the Semitic 'ambar, ambergris (EB¹¹ 1, 800^b; AJSL 23, 261; PAPS 46, 158). Ambergris is a morbid secretion of the intestines of the sperm-whale. It is a fatty, inflammable substance which develops a peculiar sweet odor on exposure to the air. It plays an important part in Oriental perfumery and is used also in pharmacy and in cookery. I have shown in my paper on *Jonah's Whale*, which I presented at our General Meeting in 1907, that there were sperm-whales in the Mediterranean (PAPS 46, 155; JHUC 296, 37.43). Gr. *thýos* and *thýoma* are equivalent to Heb. *qěṭōrt*, and both are connected with our *fume*, as is also *thysía*, and *tethyoménos* means *fragrant*. Similarly Heb. *měquṭṭár* signifies *perfumed* in Cant. 3, 6. AV uses *perfume* for *qěṭōrt* (JBL 36, 91, n. 11) in Exod. 30, 35.

⁶ See the translation of *Leviticus*, in the Polychrome Bible, p. 62, l. 2; p. 63, l. 15.

The Arabic equivalent of the stem of Heb. *qəṭōrt* means *to exhale an odor in roasting*. If you return to camp in the evening after having been out gunning all day, the smell of frying bacon is a *sweet savor*. The Hebrews sacrificed to JHVH the fat of the victim. Lev. 3, 16 states: *All the fat is the Lord's* (cf. Lev. 7, 25; 1 S 2, 16; 2 Chr. 7, 7; Gen. 4, 4). The fat pieces burnt on the altar were, according to Lev. 3, 3, 4, the fat that covers the entrails, *i.e.* the great omentum, and the fat that is about the entrails, *i.e.* the mesenterial fat, the two kidneys and the fat that is on them, and the caudate lobe of the liver. The priests said the fat was the best and richest part of the animal.⁷ Liver and kidneys and the surrounding fat were regarded as important seats of life and emotion. We find in the Hebrew psalms: *my liver exulted for I was glad and my reins admonished me at night for Thou art never out of my thoughts* (JAOS 32, 124; JHUC 325, 39).

The practice of offering the fat pieces appears in a new light if we compare a story of Prometheus in Hesiod's *Theogony* (c. 735 B.C.) in which the Bœotian poet describes the origin of the world and the birth of the gods. Socrates, who drank the cup of hemlock in 399, regarded the stories of the gods as the inventions of lying poets (EB¹¹ 25, 333^a). According to Hesiod (*Theog.* 536), gods and men met on a certain occasion at Mecone, which is the ancient name of Sicyon, near the Gulf of Corinth, 10 m. N.W. of Corinth. The business of the assembly was to decide what portions of the slain animals the gods should receive in sacrifice. On one side Prometheus arranged the best parts of the ox, covered with offal; on the other, the bones covered with fat, as the meat was covered in Homeric sacrifices. Zeus was invited to make his choice, chose the fat, and found only bones beneath. Similar fables recur in Africa and North America (EB¹¹ 22, 436^a).

If *nectar*, which is connected with Heb. *qəṭōrt*, fragrant steam of the burnt-offering inhaled by JHVH, appears in the Homeric poems as the *drink* of the gods, we must remember that the Arabic term for *to smoke tobacco* is *to drink smoke*, Arab. *šāriba-'d-duxâna*. The same term was formerly used in English. Ben Jonson (1598) says:

⁷ See the translation of *Leviticus*, in the Polychrome Bible, p. 65, ll. 33-38.

The most divine tobacco that I ever drunk. In the Oriental tobacco-pipe known as *narghileh* (Arab. *nârgîlah* or *arkilah*) the smoke passes through water before it is inhaled through a long flexible tube. The receptacle for the water, which is often scented, was originally a cocoanut shell. In Persian the cocoanut is called *nârgîl*. In India a similar pipe is known as *hubble-bubble* (or *hobble-bobble*). Other names of this water-pipe for smoking are *hookah* (Arab. *húqqah*) and *kalian* (Pers. *qaliân*).⁸ In Egypt it is called *šīšah* or *gáuzah*. The Arabic name for *cocoanut* is *gôz Hindî*. The Arabic word for *to drink* appears in our *sherbet* and *syrup*. Some men in Waukegan, Ill., *smoke their hootch* now by taking a liberal pinch of snuff, soaking it in moonshine until it is thoroughly saturated, then cramming it into a pipe, and pressing a little loose tobacco on top (The Baltimore News, April 27, 1922, p. 16, col. 6).

In a poem *The Cigarette*, by Joseph Mills Hanson (published in *The American Legion Weekly*, April 28, 1922, p. 4, col. 2), we find the stanza:

But how I longed to smoke—and not a snipe!⁹
 When comes this long-legg'd bird that saved my tripe¹⁰
 Back in the boyau¹¹—volunteer, may be,
 Or one of our supports—and handed me
 A Lucky!¹² Boy, just listen while I state
 I'm here to tell the world this one thing straight,
 No Mount Olympus god could ever quaff
 A cup of nectar sweet as that, by half!

I am indebted for this reference to Dr. O. R. Sellers, of the Johns Hopkins University.

In Homer, *ambrosia* is used as a perfume: in the *Odyssey* (4, 445) we read that when Menelaus wanted to consult the old man of the sea, Proteus, who knew all things, past, present, and future, and who took siesta, surrounded by his seals, in an ocean-cave near the mouth of the Nile, the daughter of the god covered the hero and three of his companions with hides of seals, and in order to make the odor of the hides less intolerable, she put ambrosia under their noses. The ancients had no scents dissolved in alcohol, but perfumed greases,

⁸ See cuts in CD 2878^a, 2908^a; cf. EB¹¹ 13,670^b; 19,240^a.

⁹ Stub of a cigar or cigarette. ¹⁰ Cf. *to save one's bacon*.

¹¹ Passage between two trenches. ¹² A *Lucky Strike* cigarette.

solid or liquid fats charged with odors. Pliny's statement (13, 2) that scented unguents were unknown at the time of the Trojan war is incorrect. Fats and oils absorb odors. Perfumes are extracted from flowers by the agency of inodorous fats (*enfleurage*). One of the most precious unguents was the nard-ointment, and according to Pliny (12, 43) nard-oil had a red color (*color rufus*). Also the color of myrrh, which was used as a perfume (Ps. 45, 8; Prov. 7, 17; Cant. 1, 13; 5, 5) and as an antiseptic for embalming (John 19, 39), varies from pale reddish-yellow to red or reddish-brown. Achilles's mother, Thetis (JHUC 306, 34) injected ambrosia and red nectar (Gr. *néktar erythrón*) through the nostrils of his slain friend Patroclus to preserve his body (*Il.* 19, 40). According to Herodotus (2, 86) the Egyptian embalmers removed the brains through the nostrils by means of a bent iron implement, injecting drugs, while the intestines were drawn out through an incision in the left side, whereupon the abdominal cavity was cleansed with date-brandy (JHUC 287, 33) and filled with myrrh, cassia, and other materials, and the opening sewed up; finally the body was steeped for 70 days in a solution of natron, i.e. native carbonate of sodium, which is found in some of the lakes of Egypt. On the other hand, the body of Alexander the Great is said to have been embalmed with honey (EB¹¹ 9, 306^a).

At the command of Zeus, Apollo bathed the body of the Lycian prince Sarpedon, who had been slain by Patroclus, in a river and anointed it with ambrosia (*Il.* 16, 670.680). Hera cleansed (Gr. *kátheren*) herself with ambrosia and anointed herself with fragrant ambrosian oil (*Il.* 14, 170; cf. Judith 16, 8). This was no soap, as has been suggested, but a scented massage cream. Massage, which is the oldest of all therapeutic means, is alluded to in Homer: in the Odyssey heroes returning from battle are rubbed and kneaded by female massers. *Massage* is derived from Arab. *mássada* (cf. Syr. *měšāšâ*, touching, groping; Heb. *mašāš*, to grope; Ass. *mašāšu* and *pašāšu*, to rub; JBL 39, 159). In Est. 2, 12 massage is called *tamrûqîm*, rubs: the oil of myrrh had an antiseptic effect and purified the skin; the balms or sweet odors perfumed the body; the rubs made the skin white and soft, and improved the figure (*Est.* 22). *Shampoo*

is the Hindoo term for this manipulation; Hindustani *châmpo* is the imperative of *châmpnâ*, to thrust, to press (EB¹¹ 17, 863^b). Some of our modern massage creams are said to cleanse all dust and dirt from the pores; after they have been rubbed in gently they roll out, bringing with them all the dirt and skin impurities, so that the skin appears clean and healthy with a clear and glowing color, while the cream that comes from the pores appears darkened and dirt-laden (SEP, April 15, 1922, p. 93). According to Pliny (28, 191) soap was an invention of the Gauls, who prepared it from tallow and ashes. The ancients cleansed themselves by oiling their bodies and scraping (Gr. *stlengízein*) their skins, and by baths (EB 4665). Cowper (1791) says: *Her lovely face | She with ambrosia purified.*

Ambrosia is supposed to be connected with Skt. *amṛta*, which denotes the beverage of immortality that resulted from the churning of the ocean by the gods and demons (CD s. *amrita*). The view that Gr. *ambrósios* means *immortal* is untenable. Nor can Gr. *néktar* be combined with Gr. *nógala*, dainties. The ancients regarded *néktar* as a compound of the negative *ne* and *kér*, the goddess of death, or *kteínein*, to kill. Our post-Volsteadian nectars may not always kill, but they certainly do not impart immortality.¹³ Homer applies the epithet *ambrosial*, not only to divine food and anointing oil, but also to raiment, sandals, locks. A sexagenarian knows that hair is not immortal, and if he raised a number of boys he will remember that shoes have no everlasting soles. Ambrosial curls denotes *fragrant hair*.¹⁴ Milton says (*Par. L.* 5, 57): *His dewy locks distilled ambrosia.* In Swift (*Streph. and Chloe*) we find: *Venus like her fragrant skin | Exhaled ambrosia from within.* The Scottish poet, Sir William Mure (1594–1657) has (*Dido and Æneas* 1, 461): *Her sweet ambrosial breath and nectared hair.* Our poets also speak of *nectarine kisses* or *a touch of her sweet nectar-breathing mouth*.¹⁵

¹³ Littré says s. nectar: *Ce qui ne tue pas* does not signify *ce qui donne l'immortalité*.

¹⁴ Cf. Fr. *chevelure ambrosienne*, Ger. *ambrosisches Haar*. We find also *ambrosische Nacht*.

¹⁵ German poets speak of *Nektarlippen* and *Nektarküsse*. Schiller says: *Nektarduft von Mädchenlippen*; Wieland: *der Anhauch ihres Nektarmundes*; Rückert calls the lips *Nektarkelch*. We also find *nektarne Brust* (cf. BL 70. 72). Tennyson (*The Miller's Daughter*) says: *I would be the necklace— . . . upon her balmy bosom.*

The night is often called *ambrosial*; this does not mean *holy*, as is generally supposed, but *balmy*. Thomas Moore (*Lalla Rookh* 248) speaks of *One of those ambrosial eves | A day of storm so often leaves*. Tennyson (*In Memoriam*, lxxxvi) says: *Sweet after showers, ambrosial air* and (*Ænone*): *A fruit of pure Hesperian gold | That smelled ambrosially* (see OD s. *ambrosial*). Also *ambrosial sleep* means *balmy sleep*, i.e. *healing*, refreshing sleep. Edith M. Hull says in the first chapter of *The Sheik*: It was a wonderful night, silent except for the cicada's monotonous chirping, mysterious with the inexplicable mystery that hangs always in the Oriental night. The smells of the East rose up all around her; here, as at home, they seemed more perceptible by night than by day. Often at home she had stood on the little stone balcony outside her room, *drinking in the smells of the night*—the pungent, earthy smell after rain, the aromatic smell of pine trees near the house. It was the *intoxicating smells of the night* that had first driven her, as a very small child, to clamber down from her balcony, clinging to the thick ivy roots, to wander with the delightful sense of wrongdoing through the moonlit park and even into the adjoining gloomy woods. She had always been utterly fearless.

There is no connection between the Gr. *nectar and ambrosia* and the Biblical *manna*. The manna, which sustained the ancestors of the Jews in the wilderness, was a nutritive lichen like the Iceland moss and the reindeer moss, especially the *Lecanora esculenta*, known as *manna-lichen*,¹⁶ which in times of great drought and famine has served as food for a large number of men in the arid steppes of the various countries stretching from Algeria to Tataria (EB¹¹ 16, 584). Fragments of manna-lichen carried away by the wind resemble grains of wheat. They vary in size from a pea to a hazel-nut.¹⁷ The edible lichens contain not only starchy substances, but also in some cases a small quantity of saccharine matter of the nature of mannite. It is

¹⁶Littre says s. manna: *Il est certain qu'elle est formée de lichens, surtout de lecanora affinis et lecanora esculenta*.

¹⁷According to Num. 11, 7 the manna was like coriander seed. The smooth globular fruits of *coriander sativum* are twice as large as hemp seed or about the size of a peppercorn. The Hebrew word in Exod. 16, 14, rendered *round* in AV means *flaky*; see RV, margin; cf. EB 879, n. 4.

more probable, however, that the powdered manna-lichen was mixed with tamarisk-manna and alhagi-manna (Arab. *taranjabîr*). The manna-lichen was ground in querns or pounded in mortars (Num. 11, 8) and mixed with the honey-like drops exuding from the soft twigs of the *tamarix Gallica* or with the exudation of the camel's thorn (*alhagi Maurorum* or *camelorum*). After this mixture of powdered manna-lichen and tamarisk-manna or alhagi-manna had been baked in baking-pots, it tasted like honey-cake (Exod. 16, 31) or like pastry baked in sweet-oil (Num. 11, 8).

The real meaning of the name *manna* has never been explained. Arab. *mann* means not only *manna*, but also *gift*, present, favor, benefit; it denotes also the *manna-insect* which causes the secretion of the manna by puncturing the twigs of the tamarisk (*i.e.* the *Coccus manniparus* or *Gossyparia mannifera*). The presence of these insects may be responsible for the legend that when some of the manna was left until the following day, it became wormy and offensive except on the sabbath (Exod. 16, 20.24). The accounts given in Exod. 16, 14-36; Num. 11, 7-9 are inaccurate and embroidered. The primary connotation of Heb. *man*, manna, is not *gift*, but *separation*, elimination, secretion. It is connected with the preposition *min*, from, which means originally *part* (VS 397; GB¹⁶ 435^a, 4; GK²⁸, § 119, w, note 1). *To part* may mean *to partition*, apportion. Arab. *manîjah*, fate, signifies properly *portion* (Heb. *mēnât*, *helq*). This is also the primary connotation of Arab. *mann* and *minhah*, gift, present. AV uses *to part* for Heb. *hiṣrîd* in Ruth 1, 17, where Ruth says to Naomi: The Lord do so unto me and more also if aught but death part thee and me. Here Luther has: *Der Tod muss mich und dich scheiden*, and *Ausscheidung* is the German term for *secretion*. Arab. *mâna*, *jamînu*, to plow, is *to break* the ground. The original meaning of Heb. *mîn*, species, is *division*. Lat. *species* means not only *particular sort*, but also *look*, form (Heb. *tēmûnâ*; cf. BA 1, 124). The post-Biblical *mîn*, heretic, signifies properly *separatist*. Brugsch and Ebers combined Heb. *man* with the late Egyptian *mnw*; if this denote *manna*, it is no doubt a loan-word, so that it throws no light on the etymology.

In Exod. 16, 15 the name *manna* is derived from *mân-hû*: when the ancestors of the Jews saw it, they said to one another: *mân-hû*,

what is this? for they did not know what it was. *Mân-hû*, however, is Aramaic, not Hebrew. The Syriac Bible has *mânâû* = *mânâ-hû* in Exod. 16, 15. In Syriac we find *mân* or *môn*, and *mânâ*, what, but the Hebrew pronoun for *what?* is *mâ*. The popular etymology given in Exod. 16, 15 must be a late gloss. AV has *What is this?* in the margin, also *It is a portion*. In the text AV renders: *It is manna*. RV has in the text *What is this?* and *It is manna* in the margin.

Tamarisk-manna is alluded to by Herodotus (7, 31). He says in his account of Xerxes's march to Sardes during his expedition against Greece (about 481) that the Callatebian craftsmen prepared honey from tamarisks and from wheat (Gr. *ándres demioergoi méli ek myríkes te kai pyroû poieûsi*). In the OT the term *honey* denotes also various inspissated *fruit-juices* or syrups, especially *grape-syrup* (Gr. *hépsema*, *síraion*, Arab. *dibs*). Callatebus was a town in Lydia S.W. of Sardes, probably near the Lydian Philadelphia, the present Alashehr, 83 m. E. of Smyrna. This Philadelphia was called Little Athens on account of its festivals and temples. It was captured in 1402 by Timur (or Tamerlane) who built a wall of the corpses of his prisoners. The tamarisk-honey is tamarisk-manna, and the honey prepared from wheat may have been glucose made from wheaten starch (Plin. 18, 76) by the action of dilute sulphuric acid. This acid, which is perhaps the most important of all chemicals, was, it may be supposed, known to the ancients (*cf.* Plin. 35, 175), while hydrochloric acid was first obtained about the end of the Thirty Years' War (1648). Sulphuric acid is found uncombined in natural waters of certain volcanic districts. The Lydian Philadelphia was subject to frequent earthquakes. The Mæander valley and the Gulf of Smyrna are notorious seismic foci (EB¹¹ 2, 757^b). The Mæander valley is noted for its hot springs. The Lydians were credited with several inventions, *e.g.* dice and coined money. They were also celebrated for their music and gymnastic exercises. The Lydian empire was the industrial power of the ancient world.